

Notice of Allowability

Application No.

10/726,832

Examiner

DANIEL G. MARIAM

Applicant(s)

ZIEL ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on 10/16/07.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |



Reasons for Allowance

1. Claims 1-32 are allowed.
2. The following is an examiner's statement of reasons for allowance: none of the prior art of record disclose or fairly suggest 1) means for interactively selecting a view perspective with respect to a multiple-dimensional data set; means for analyzing the multiple-dimensional data set to identify at least one structure-of-interest represented in the data set, the means for analyzing responsive to the view perspective; means for identifying the foremost portion of the structure-of-interest responsive to the means for analyzing; means for associating a set of data points responsive to the means for identifying to generate a face plate; and means for applying the faceplate to the multiple-dimensional data set as defined by independent claim 1; 2) identifying a view axis that intersects a multiple-dimensional data set; modifying the multiple-dimensional data set to align one of the dimensions of the multiple-dimension data set responsive to the view axis; locating a portion of a structure-of-interest with respect to a distance along a vector parallel to view axis; associating a set of pixels with a faceplate; and generating a composite view in accordance with the faceplate as defined by independent claim 13; 3) a memory-storage unit configured to store a multiple-dimensional data set; a multiple-dimensional image processor communicatively coupled to the memory-storage unit, the image processor configured to convert the multiple-dimensional data set to a two-dimensional representation in a plane orthogonal to an operator-identified view axis; and an image-rendering device communicatively coupled to the image processor, the rendering device configured to display the two-dimensional representation of a volume-of-interest contained within the three-dimensional data, wherein the two-dimensional representation is responsive to a faceplate orthogonal to the view axis that includes

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information associated with a structure-of-interest as defined by independent claim 21; and 4) a computer-readable medium having processor-executable instructions thereon which, when executed by a processor, direct the processor to: apply an input indicative of an operator preference for a spatial arrangement of a representation of a volume-of-interest located with a multiple-dimensional data set; generate a faceplate corresponding with a structure within the volume-of-interest along a view axis responsive to the operator preference; and combine the faceplate with information from the multiple-dimensional data set to generate a two-dimensional array of pixels representing the structure as defined by independent claim 26. It is for these reasons and in combination with all of the other elements of the claims that claims 1-32 are allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BRIAN P. WERNER can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DANIEL G MARIAM
Primary Examiner
Art Unit 2624

November 12, 2007